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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,172	11/25/2000	Kia Silverbrook	NPS022US	3860

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AUSTRALIA

EXAMINER

ABDULSELAM, ABBAS I

ART UNIT PAPER NUMBER

2674

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/722,172

Applicant(s)

SILVERBROOK ET AL.

Examiner

Abbas I Abduselam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections 35 U.S.C. 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westerman et al. (USPN 6323846) in view of Hagihara (USPN 5999275).

Regarding claim 1, Westerman teaches a multi-touch surface apparatus for detecting spatial arrangement on the surface, which includes a digital code. See col. 8, lines 10-27 and Fig 1. Westerman teaches an array of proximity sensor means embedded in surface, scanning means for forming digital proximity images from proximities measured by the sensing means, image segmentation means and control tracking as well as identification means. See col. 8, lines 50-67, col.9, lines 1-14 and Fig 1. Furthermore, Westerman teaches the use of a multi-touch surface for the purpose of writing with the pen-grip configurations. See col. 41, lines 21-30 and Fig 28 (494, 495, 486). However, Westerman does not disclose a surface having coded data disposed on the surface and the associated detection means. Hagihara on the other hand teaches a scanner (1) reading a shading line on the surface of the white plate and the binary coder (6) outputting the binary coded data (26) representing the shading line. See col. 5, lines 25-35 and Fig 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Westerman's method of inputting system to adapt Hagihara's use of binary coded data. One would have been motivated in view of the suggestion in Hagihara that the use of

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binary coded data on the white plate is functionally equivalent the desired use of coded data disposed on the surface. The use of binary coded data helps function an image reader as taught by Hagihara.

Regarding claims 2-3, Westerman teaches the output of identification process (247, 248) with respect to fingers and their attachments. In addition, Westerman teaches chord motion event generation with respect to attachment of a number of motion units. See Fig 16 and Fig 40 (678, 680).

Regarding claim 4, Westerman teaches orientation facts and contact orientations for various fingers and palm in different scenarios. See Fig 25 (A-D).

Regarding claims 5, and 7-8, Westerman teaches a proximity image of a hand in the pen grip configured with a thumb and index fingers. See Fig 15 and col. 11, lines 48-50.

Regarding claim 6, Westerman teaches a proximity sensor with respect to the distance between the touch device (38) and the sensing electrode (33). See Fig 2.

Regarding claim 9, Westerman teaches segmentation of regions including the movement of right and left hands and their positions (252) with respect to a region (284). See Fig 20(B-C).

Regarding claim 10, Westerman teaches a circuitry which is used to convert proximity sensor output to a digital code. See Fig 7 and col. 11, lines 25-26.

Regarding claims 11-12, Westerman teaches the current location and surface contact with respect to path velocities and acceleration. Westerman also teaches computation of percentage acceleration ratios. See Fig 22 (320), Fig 37 (551, 552), col. 27 lines 41-52.

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Regarding claims 13-14, Westerman teaches a multi-touch surface with respect to a circuitry changing a voltage data into digital code as well as a circuitry communicating the digital code into another electronic device. See col. 8, lines 10-27.

Conclusion

2. The prior art made of record and not relied upon is considered to applicant's disclosure.

The following arts are cited for further references.

U.S. Pat. No. 5,422,760 to Abbott et al.

U.S. Pat. No. 5,321,559 to Nguyen et al.

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3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abdulsalam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand delivered responses should be brought to crystal park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulsalam

Examiner

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RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600